



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,405	02/03/2005	Young Seok Han	HANY3001/REF	6247
<div>23364 7590 10/04/2007</div> <div>BACON & THOMAS, PLLC</div> <div>625 SLATERS LANE</div> <div>FOURTH FLOOR</div> <div>ALEXANDRIA, VA 22314</div>				
			<div>EXAMINER</div> <div>BUI, BRYAN P</div>	
			<div>ART UNIT</div> <div>2109</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE</div> <div>10/04/2007</div>	<div>DELIVERY MODE</div> <div>PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,405

Applicant(s)

HAN, YOUNG SEOK

Examiner

Bryan P. Bui

Art Unit

2109

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/03/2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03/08/2007.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1. Applicant has submitted a preliminary amendment to Application No. 10/523405 on February 03, 2005 claiming priority from PCT Application PCT/KR03/01554 filed on August 01, 2003 claiming priority from Foreign Application (KOREA) 10-2002-0046046 filed on August 05, 2002. This following office action is based on the preliminary amendment filed on February 03, 2005 having claims 1-5 and Figures 1-7.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/KR03/01554 filed on August 01, 2003. The priority date considered for the application is August 05, 2002, which is the filing date of Foreign Application mentioned above.

Status of Claims

Claims 1-5 are pending of which claim 1 is in independent form.

Claims 1-5 are rejected for the reasons discussed in detail below.

Information Disclosure Statement

3. The information disclosure statement filed on February 03, 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

The information disclosure statement (IDS) submitted on 03/08/2007 has been received and entered into the record. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

4. The disclosure is objected to because of the following informalities:
 - a. "the local name server 209" on line 6, page 8 should be changed to "the local name server 102".
 - b. "the central name server 205" should be changed to "the central name server 103".
 - c. The reference numbers 102 (line 11), 101 (line 12) on page 12 refer to the wrong elements (a local name server program and client software). Appropriate correction is required.
 - d. The specification lacks of section heading (g) as in the guideline below.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.

Art Unit: 2109

- (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
 - (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
 - (i) DETAILED DESCRIPTION OF THE INVENTION.
 - (j) CLAIM OR CLAIMS (commencing on a separate sheet).
 - (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
 - (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:

Art Unit: 2109

- (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
- (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR

Art Unit: 2109

1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Appropriate correction is required.

Drawings

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters 208 and 210 have both been used to designate the same step of *"Delivery Q to an address processing module of a user computer for process request"* (see Figure 2). Moreover, reference character Q has been used to designate both "User Inquiry Representation" and "top-level domain extension" as shown in Fig 2.

The drawings are further objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the

Art Unit: 2109

description: D (the extension) (see page 8). Moreover, the drawings include the following reference character(s) not mentioned in the description: 701-706 in Figure 7.

Additionally, Figure 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-5 are rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter.

Art Unit: 2109

Regarding claim 1, an "extended internal domain service system" comprising of "a client module", "a local name server module", "a central name server module" and "an extension table" is being cited. However, it appears that one of ordinary skill in the art could interpret the system as software, per se. As defined in the specification, it is clear that each of the modules mentioned above is a software program instruction to be executed to provide domain services. Also, an extension table is interpreted as a form of data structure. Thus, claim 1 is directed to an arrangement of software, per se, and it is rejected as not being tangible.

The other dependent claims (claims 2-5) included in the statement of rejection but not specifically addressed in the body of the rejection have inherited the deficiencies of their parent claim and have not resolved the deficiencies. Therefore, they are rejected based on the same rationale as applied to their parent (claim 1) above.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2109

Regarding claim 2, the recitation of "a first extension and a second extension" (in line 3) is not described in the specification. It is unclear as to which extension is "the first" or "the second". Moreover, the recitation mentioned above implies there is more than one extension extracted from the user inquiry representation. Thus, claim 2 is rejected as set forth above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edelstein et al. (US Pat No. 5,764,906) in view of Schneider (US Pat No. 7,136,932 B1).

Regarding claim 1, Edelstein et al. discloses an extended internal domain service system (see Abstract: "A universal electronic resource denotation, request and delivery system") comprising:

A) a client module installed at a user computer (see Edelstein : "client computer" in the Abstract); and

B) a local name server module installed at a local name server connected to the

Art Unit: 2109

user computer via a network (see Edelstein :“local server” in the Abstract); and

C) a central name server module installed at a central name server connected to the user computer via a network (see Edelstein :“central registry server” in the Abstract);

D) an extension table stored in the central name server for maintaining an extension and an address of the local name server corresponding to the extension [The Central Registry is the site wherein the official versions of all Source and Resource Aliases, together with any relevant information associated with them, shall reside. It is the responsibility of this site to store and disseminate all Resource Alias-related information, to register new Source Aliases and Resource Aliases for information providers, and to allow Resource Alias-related information to be updated by information providers] (see Edelstein, column 6, lines 7-14); and

E) the central name server module searches the address of the local name server corresponding to the extension extracted from the user inquiry representation with reference to the extension table, and delivers the searched address to the user computer [Whenever a Local Server requests a Resource Alias from the Central Registry or a Root Server and whenever a Client computer requests such information from a Local Server, the aggregate of information delineated above (the Resource Alias Record) is transmitted to the requester] (see Edelstein, column 7, lines 49-54); and

F) the local name server module provides a service corresponding to the user inquiry representation. [“Local Servers”(intermediate network nodes to which Clients may be connected to and which provide immediate service for Clients)](see column 5, lines 60-63).

However, Edelstein does not explicitly disclose the claimed feature “wherein the client module extracts an extension from a user inquiry representation inputted from a user, determines whether the extracted extension is a formal top-level domain, delivers

Art Unit: 2109

the user inquiry representation to an address processing module of the user computer if the extracted extension is the formal top-level domain, and delivers the user inquiry representation to the central name server if the extracted extension is not the formal top-level domain". Schneider, from the same or similar field of endeavors, discloses the browser 112 extracts the domain name from the URL and passes the domain name to the resolver 114 on the client-side of the DNS application. As part of a DNS query message, the DNS client 114 sends the domain name to a DNS server system 120' connected to the Internet. The DNS client 114 eventually receives a reply, which includes the IP address for the domain name. The browser then opens a TCP connection 116 to the HTTP server process 120 located at the IP address (see Schneider, column 17, line 62 – column 18, line 3, together with Figure 1a)). Thus, it would have been obvious to someone of ordinary skill in the art at the time the invention was made to combine the systems of those cited references (i.e Edelstein's and Schneider's) to achieve the claimed feature "wherein the client module extracts an extension from a user inquiry representation inputted from a user, determines whether the extracted extension is a formal top-level domain, delivers the user inquiry representation to an address processing module of the user computer if the extracted extension is the formal top-level domain, and delivers the user inquiry representation to the central name server if the extracted extension is not the formal top-level domain". Such combination would have permitted Edelstein's system to provide further use of domain name space and resolution processing by generating and/or resolving a

Art Unit: 2109

resolvable domain name upon detecting a fictitious domain name from a received domain name (see Schneider, the Abstract).

Regarding claim 2, Edelstein et al. further discloses the claimed features of "a local extension table stored in the user computer for maintaining the address of the local name server corresponding to a first extension and a second extension" [the Client sites retain a collection of recently used Resource Aliases and their related data including, but not limited to, the Addresses of the Electronic Resources associated with the Resource Aliases and descriptions of those Resources](see Edelstein, column 6, lines 35-39), and "wherein the client module searches the address of the local name server corresponding to the extension extracted from the user inquiry representation with reference to the local extension table if the extracted extension is not the formal top-level domain, and delivers the user inquiry representation to the central name server if the address of the local name server is not searched with reference to the local extension table" [The Client process 501 is depicted as first searching its own cache via the Nickname or Resource Alias space for the record. That failing, the Client 501 requests the Record from its Local Server 502. If the Local Server 502 does not have that data cached, it requests it of the Central Registry or of a Root Server 503. If the Record is located in any of those places, the process which finds it sends the Record back, and each of the processes receiving it caches it; finally the Record is displayed for the User] (see Edelstein, column 11, lines 51-59, together with Figure 5). Most of the limitations of this claim have been noted in the rejection of claim 1, therefore claim 2 is rejected as set forth above.

Regarding claim 3, Edelstein et al. discloses the claimed feature "an internal domain table stored in the local name server for maintaining internal domains and addresses of resources corresponding to the internal domains, wherein the local name server module analyzes received user inquiry representation and determines whether a service request from a user is a page access request, a similarity domain search request, or other application service request, and the internal domains maintained in the internal domain table are compared with the user inquiry representation if the service request from the user is the page access request, and an address of a corresponding resource is delivered to the user computer". Most of the limitations of this claim have been noted in the rejection of claim 1, therefore claim 3 is rejected as set forth above.

Regarding claim 4, Edelstein et al. discloses the claimed feature "wherein the local name server module searches a domain similar to the internal domain extracted from the user inquiry representation among the internal domains maintained in the internal domain table and delivers the searched domain to the user computer if the service request from the user is the similarity domain search request, and the local name server module performs an application service defined for a requested internal domain and delivers a result of the performance to the user computer if the service request from the user is other application service request" as the Client will send the character sequence to the local server and request a corresponding Resource Alias record at 511. Upon receipt of such a request, the local server will query its cached Resource Aliases at 512. If the sequence is a valid cached Resource Alias, the local service will retrieve the corresponding Resource Alias record at 513 and transmit acknowledgment of the inquiry and the Resource Alias record 514 back to the Client

Art Unit: 2109

501 (see Edelstein, column 12, lines 11-19, together with Figure 5). Most of the limitations of this claim have been noted in the rejection of claim 1, therefore claim 4 is rejected as set forth above.

Regarding claim 5, Edelstein et al. discloses the claimed feature "wherein the internal domain table maintains authorities of users in connection with the internal domains stored in the internal domain table, and the local name server module authenticates a user who requested the service with reference to the internal domain table and provides a service corresponding to the user inquiry representation for the user according to a result of the authentication" as an authentication and administration feature that allows a user to administer the aliases and related data which pertain to his/her resources (see Edelstein, the Abstract). Most of the limitations of this claim have been noted in the rejection of claim 1, therefore claim 5 is rejected as set forth above.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tan et al. (US Pat No. 6,314,469 B1)

Day et al. (US Pat No. 6,728,767 B1)

Mann et al. (US Pat No. 6,519,589 B2)

Aldred et al. (US Pat No. 6,209,036 B1)

Sundaram et al. (US Pat No. 7,136,922 B2)

Broadhurst. (US Pat No. 6,560,634 B1)

Ryan (US Pat No. 6,412,014 B1)

Kwan et al. (US Pat No. 6,381,627 B1)

Keller et al. (US Pat App No. 2003/0145112 A1)

Gloe (US Pat App No. 2004/0083306 A1)

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan Bui whose telephone number is (571)-270-1981. The examiner can normally be reached on Monday-Friday from 7:30 am to 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Coby can be reached on (571)-272-4017. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 2109

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from USPTO Customer Service Representative or access to the automated information system, call 1-(800)-786-9199 (in U.S.A or Canada) or 1-(571)-272-1000.

Examiner

Bryan Pui

Bryan P. Bui

Frantz Coby
FRANTZ COBY
SUPERVISORY PATENT EXAMINER